Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1-23. (cancelled)

24. (new) A method for determining whether a compound of interest is an agonist of a receptor which couples to both Gs and Gq proteins thereby affecting an adenylyl cyclase or phospholipase C pathway said method comprising:

(a) introducing into a first and second cell line, an expression vector comprising a nucleotide sequence encoding said receptor which is not normally expressed in said first and second cell lines, wherein said first and second cell lines express urokinase-type plasminogen activator (u-PA) and said second cell line also has inhibited Gs signaling of u-PA activity;

(b) contacting said first and second cell lines with said compound of interest;

(c) measuring the u-PA activity by fluorescence or absorbance spectroscopy of the cell culture supernatant of step (b) and the cell culture supernatant of said first and second cell lines which have not been in contact with said compound of interest; and

(d) determining whether said compound of interest is an agonist of a receptor which couples to both Gs and Gq proteins thereby affecting an adenylyl cyclase or phospholipase C pathway, wherein the u-PA activity of the supernatant from said first

and second cell lines from step (b) is greater than the u-PA activity of the supernatant from said first and second cell lines which have not been in contact with said compound of interest.

25. (new) A method for determining whether a compound of interest is an agonist of a receptor which couples to both Gs and Gq proteins thereby affecting an adenylyl cyclase or phospholipase C pathway said method comprising:

(a) providing a first and second cell line, wherein said first and second cell lines express urokinase-type plasminogen activator (u-PA) and wherein said second cell line also has inhibited Gs signaling of u-PA activity;

(b) introducing into a group of said first and second cell lines, an expression vector comprising a nucleotide sequence encoding said receptor which is not normally expressed in said first and second cell lines, thereby providing stably transfected cells of said first and second cell lines;

(c) contacting said stably transfected cells of step (b) and said first and second cell lines of step (a), which are not stably transfected with said receptor, with said compound;

(d) measuring the u-PA activity, by fluorescence or absorbance spectroscopy, of the cell culture supernatant of said stably transfected cells of step (c) and the cell culture supernatant of said first and second cell lines of step (c); and

(e) determining whether said compound of interest is an agonist of a receptor which couples to both Gs and Gq proteins thereby affecting an adenylyl cyclase or phospholipase C pathway, wherein the u-PA activity of the supernatant from said stably transfected cells of step (c) is greater than the u-PA activity of the supernatant of said first and second cell lines of step (c), which are not stably transfected with said receptor.

26. (new) A method for determining whether a compound of interest is an antagonist of a receptor which couples to both Gs and Gq proteins thereby affecting an adenylyl cyclase or phospholipase C pathway said method comprising:

(a) introducing into a first and second cell line an expression vector comprising a nucleotide sequence encoding said receptor which is not normally expressed in said first and second cell lines, wherein said first and second cell lines express urokinase-type plasminogen activator (u-PA) and said second cell line also has inhibited Gs signaling of u-PA activity;

(b) contacting a first group of said first and second cell lines of step (a) with a known agonist of said receptor;

(c) contacting a second group of said first and second cell lines of step (a) with a known agonist of said receptor and said compound of interest;

(d) measuring the u-PA activity, by fluorescence or absorbance spectroscopy, of the cell culture supernatant of said first and second groups of steps (b) and (c); and

(e) determining whether said compound of interest is an antagonist of a receptor which couples to both Gs and Gq proteins thereby affecting an adenylyl cyclase or phospholipase C pathway, wherein the u-PA activity of the supernatant from said first group of step (b) is greater than the u-PA activity of the supernatant of said second group of step (c).

27. (new) The method of claim 24, wherein said Gs and Gq protein coupled receptor is human PTHR.

28. (new) The method of claim 25, wherein said Gs and Gq protein coupled receptor is human PTHR.

29. (new) The method of claim 26, wherein said Gs and Gq protein coupled receptor is human PTHR.

30. (new) The method of claim 24, wherein said first cell line and said second cell line is LLC-PK1.

31. (new) The method of claim 25, wherein said first cell line and said second cell line is LLC-PK1.

32. (new) The method of claim 26, wherein said first cell line and said second cell line is LLC-PK1.

33. (new) The method of claim 26, wherein said compound of interest is administered after said agonist in step (c).

34. (new) The method of claim 26, wherein said compound of interest is administered before said agonist in step (c).

35. (new) The method of claim 26, wherein said compound of interest is administered concurrently as said agonist in step (c).